

CLAIMS

I claim:

1. A method of navigating a menu structure within an electronic product, comprising the steps of:

identifying a first location within said menu;

obtaining a first utterance of speech;

associating said first utterance with said first location and generating therefrom a stored first location;

obtaining a second utterance of speech; and

matching said second utterance with said first utterance to identify said stored first location within said menu; and

navigating to said first location.

2. A method of navigating a menu structure within an electronic product, comprising the steps of:

identifying a user-selected navigation path through said menu structure to a first location within said menu;

obtaining a first utterance of speech;

associating said first utterance with said navigation path;

obtaining a second utterance of speech; and

matching said second utterance with said first utterance to retrieve said navigation path associated with said first utterance; and

using said retrieved navigation path to navigate to said first location within said menu.

3. The method of claim 2 further comprising storing said navigation path as a sequence of navigation steps leading to said first location.

4. The method of claim 2 further comprising storing said navigation path as a semantic sequence of navigation steps leading to said first location.

5. The method of claim 2 wherein said menu structure includes associated text and said method further comprises storing said navigation path as a semantic sequence of text associated with the navigation steps leading to said first location.

6. The method of claim 2 further comprising constructing a speech model associated with said first utterance and associating said speech model with said navigation path.

7. The method of claim 2 further comprising using a speech recognizer to compare said first and second utterances in performing said matching step.

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8. The method of claim 2 further comprising constructing a speech model associated with said first utterance and using said speech model to populate the lexicon of a speech recognizer; and

using said speech recognizer to compare said first and second utterances in performing said matching step.

9. The method of claim 2 wherein said step of identifying a user-selected navigation path comprises displaying said first location on a visible display associated with said electronic product and prompting said user to provide said first utterance.

10. The method of claim 2 further comprising providing user feedback of the association between said first utterance and said navigation path by said first location on a visible display associated with said electronic product and producing an audible representation of said first utterance.

11. The method of claim 2 further comprising providing user feedback of the association between said first utterance and said navigation path by said first location on a visible display associated with said electronic product and producing a textual representation of said first utterance.

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12. The method of claim 10 wherein said audible representation is provided by storing said first utterance as audio data and replaying said audio data at user request.

13. The method of claim 11 wherein said textual representation is provided using a speech recognizer.

14. The method of claim 11 wherein said textual representation is provided by storing text data associated with said first utterance and displaying said text data at user request.

15. A voice binding system to aid in user operation of electronic devices, comprising:

- a menu navigator that provides a traversable menu structure offering a plurality of predefined menu locations;

- a speech recognizer having an associated lexicon data store;

- a processor for adding user-defined speech to said lexicon; and

- a voice binding system coupled to said menu navigator for associating said user-defined speech with predetermined menu locations within said menu structure, operable to traverse to a predetermined menu location in response to a spoken utterance corresponding to said user-defined speech.

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16. The voice binding system of claim 15 wherein said menu navigator includes at least one navigation button operable to traverse said menu structure.

17. The voice binding system of claim 15 wherein said voice binding system stores predefined menu locations as traversal path sequences.

18. The voice binding system of claim 15 wherein said voice binding system stores predefined menu locations as semantic sequences.

19. The voice binding system of claim 15 further comprising user feedback system operable to audibly reproduce the user-defined speech associated with predefined menu locations.

20. The voice binding system of claim 19 wherein said user-defined speech is stored as recorded speech waveforms and wherein said user feedback system replays said waveforms in response to user navigation to associated predefined menu locations.